

3. As suggested by the Examiner, the Applicants wish to delay the submittal of formal drawing until an allowance of claims.

4. In this paragraph, the Examiner introduces 35 U.S.C. §103(a). No response is required.

5. The Examiner rejects claims 1 and 2 under 35 U.S.C. §103 (a), as being unpatentable over U.S. Patents Nos. 4,218,491 or 4,212,895, both to Law et al.

Law et al. '895 notes the prior use of organic solvent extraction techniques to acquire a hop extract and to further purify the extract. Law et al. '895 adds that this technique imparts a residual of over 1% organic solvent in extract produced with organic solvent extraction.

The suggested combination of the Law et al. '895 solvent polluted streams with solvent free CO₂ extract would result in an unacceptable product. Combining the organic solvent (such as methylene chloride) extract of the Law et al., with the CO₂ extraction product of the Law et al. '491 process, is not only absent in the teachings of any hop extraction patent; it is a somewhat ludicrous suggestion. Organic solvent free hop extract streams are produced with considerable expense. Combining organic solvent containing streams with pure extracts from carbon dioxide extractions would result in an inferior and unmarketable product, certainly not exhibiting the qualities of the claimed invention. The Applicants wish to stress this point to the Examiner. The fractionated, high alpha material that is added to the whole hop extract in the Applicants' invention does not include the undesirable and off-flavor components that are included in an organic solvent extraction product.

Another key and unforeseen feature of the Applicants' enriched product is the stability that the

enriched, high alpha product exhibits. This factor alone is worthy of due consideration, especially given the high degree of uncertainty lent to the brewing process by fluctuations in flavoring attributes of hop extracts over time. This unexpected advantage of the addition of the alpha-rich stream to the CO₂ extract stream are clearly discussed in the Applicants' specification. The fact that this new product is being met with wide acceptance and being sought after in the industry, solely on the basis of its novel formulation, is indicative of secondary considerations pertinent to the Applicants' assertions of non-obviousness under §103.

The Applicants' product is superior to conventional whole hop extracts because this enriched hop extract is not equivalent to a mixture that a brewmaster could formulate "to obtain a beer with the desired balance of acids and aromas." The brewmaster's conventional wisdom teaches away from premixing extract products. The brew kettle sufficiently mixes flavoring materials, why add another pre-processing step?

However, to better distinguish the Applicants' invention over the teachings of the Law et al. patents, and clarify the Applicants' claims in response to the Examiner concerns, the claims of the Applicants' invention have been amended as herein above directed. The product identified in the claims includes specific elements that are neither present nor taught in either cited Law et al. patent or in any other reference of record. The Applicants assert that the revised claims are now in condition for allowance.

7. The Examiner's request for the Applicants' attention to *In re Levin*, 84 USPQ 232 (1949) and the cases cited therein is regarded with a sense of peculiar wonderment. Beyond the insinuation that the Applicants' invention is a simple "kitchen recipe," the Applicants note that *Levin* has never been

cited in a USPQ listed case relating to the patentability of claims past the year 1958, and prior to that year, in only two other cases. Interestingly, in two of these three cases, *Levin* was cited in the same breath as *In re Hass et al.* 60 USPQ 544 (1944). *Hass et al.* is somewhat infamous, as it is often cited as an outmoded standard for the determination of *prima facie* obviousness under §103. The past forty years of case law regarding obviousness rejections under §103 and proper tests, established under *Graham v. John Deere Co.* 148 USPQ 459 (1966) and its progeny, must not be skipped for the sake of expedient claim rejections. The Examiner is respectfully requested to reconsider the utility of the Applicants' invention, made in the highly competitive and intensely researched field of hop derived products, especially in the light of current standards for the determination of obviousness under §103.

Although it is known to purify hop extract, it is not known to recombine purified extract into the whole hop extract. One skilled in the art would certainly avoid the Applicants' process, labeling it counterproductive. At best, a blended product so produced, would be expected to perform no better than the whole extract prior to enrichment. The unforeseen advantages of this whole extract enrichment include the stabilization of the product and the consistent homogeneity in the product that is afforded by the re-introduction of specific purified steams back into the whole hop extract. As noted by the Applicants in their originally filed specification (beginning on page 9, line 28 therein), the blended formulation also unexpectedly exhibits a better consistency for pouring and flow, when compared to either the whole extract or purified components.

8-11. In conclusion, the Examiner's mixture of Law et al. '895 and '491 could not produce the Applicants' product as claimed. As listed in the Examiner cited table at the top of col. 2 in Law et


al. '895, the organic solvent extract includes residual organic solvents, such as methylene chloride or methanol, in a range of 0.5 to 1 percent by weight. As opposed to these toxic organic solvents, the Applicants' claims as amended require that their product be formed by CO₂ extraction methods.

The Applicants request reconsideration of the claims as amended and added. The Applicants have fully addressed all of the Examiner's concerns, and believe that claim 1, as amended in response to the Examiner's rejections, claim 2, which depends from amended claim 1, and new claims 12 through 19 are all in condition for allowance. The Applicants therefore respectfully request allowance of claims 1 and 2, and 12 through 19.

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the application, he is invited to call the Applicants' undersigned representative at (509) 453-1319.

Respectfully submitted,


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CERTIFICATE OF TRANSMITTAL BY FACSIMILE

I hereby certify that this correspondence, and all referenced documents, are being transmitted via facsimile to the Commissioner of Patents and Trademarks, Washington D.C. at facsimile number (703) 305-3602 on October 2, 2000.



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